REMARKS

Claims 1-26 are pending in the present application. In the Office Action mailed August 25, 2005, the Examiner took the following action: (1) objected to the drawings; (2) objected to the specification due to informalities; (3) rejected claims 1 and 2 under 35 U.S.C. 102(b) as being anticipated by York (U.S. 4,932,814); (4) rejected claims 8-10 under 35 U.S.C. 103(a) as being unpatentable over York in view of Orrell (U.S. 4,720,897); (5) rejected claim 11 under 35 U.S.C. 103(a) as being unpatentable over York in view of Orrell and further in view of Kostrzewski (U.S. 5,072,948); (6) rejected claim 12 under 35 U.S.C. 103(a) as being unpatentable over York in view of Brown (U.S. 6,382,889 B1); and (7) rejected claims 13-26 under 35 U.S.C. 103(a) as being unpatentable over York in view of Orrell and further in view of Boyl-Davis (U.S. 6,843,328 B2).

The Examiner acknowledged, however, that claims 3-7 would be allowable if rewritten to include the limitations of their respective base and intervening claims. Applicants wish to thank the Examiner for acknowledging the presence of allowable subject matter, and respectfully request reconsideration of the application in view of the foregoing amendments and the following remarks.

I. Objections to the Drawings

The Examiner objected to the drawings under 37 C.F.R. 1.83(a) on grounds that the drawings allegedly fail to show a limitation recited in claim 5, specifically, the recitation of the "earth magnet." Applicants respectfully direct the Examiner's attention to the component designated as reference numeral 166 on Figure 5, and to the Detailed Description at page 8, lines 21-23, which states "The field assembly 166 may include one or more rare earth permanent magnets that, in combination with the armature windings 158, provide a lightweight brushless motor." Also, the Detailed Description at page 9, lines 28-31 states in relevant part

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"Specifically, because the tool assembly 150 combines a field assembly 166 that may include one or more rare earth magnets."

Thus, Applicants respectfully submit that "earth magnet" limitation recited in claim 5 is shown in the drawings, as shown in Figure 5 and designated with reference numeral 166. Accordingly, Applicants respectfully request reconsideration and withdrawal of the objection to the drawings.

II. Objections to the Specification

The Examiner objected to the specification due to informalities. Applicants have amended the specification and/or drawings to correct the informalities noted by the Examiner.

Specifically, the following informalities have been corrected:

(1) Figure 1 has been revised to include reference numeral 100 designating the manufacturing assembly;

(2) on page 4, line 7, the character reference to "workpiece 24" has been amended to -- workpiece 20 --;

(3) on page 4, line 32, the character reference to "workpiece surface 102" has been amended to -- workpiece 20 --;

(4) on page 5, line 23, the character reference to "workpiece surface 102" has been amended to -- workpiece 20 --;

(5) on page 5, line 25, the character reference to "workpiece surface 102" has been amended to -- workpiece 20 --;

(6) on page 7, line 27, the character reference to "and clamp-up assemblies 120, 160" has been amended to -- assembly 120 --; and

(7) on page 7, line 35, and extending to page 8, line 1, the character reference to "the position sensor assembly 140" has been deleted.

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Applicants respectfully request reconsideration and withdrawal of the objections to the specification in view of the foregoing amendments and revisions.

III. Rejections of claims under 35 U.S.C. §102(b) and §103(a).

Claims 1-12

As amended, claim 1 recites an apparatus for performing a manufacturing operation on a workpiece, the apparatus comprising a base member having a first aperture disposed therethrough; a drive platform having a second aperture disposed therethrough, *the drive platform being spaced apart from the base member by a separation distance and aligned with the base member such that the first and second apertures are approximately aligned along an axis*; a plurality of guide members extending between the drive platform and the base member, at least one of the drive platform and the base member being moveable along the guide members to increase or decrease the separation distance; at least one drive member operatively coupled between the drive platform and the base member, *wherein the plurality of guide members and the at least one drive member are distributed around the first and second apertures*; and a servo motor operatively coupled to the drive member such that as the servo motor drives the drive member, the separation distance is varied. (emphasis added).

York (U.S. 4,932,814)

York teaches a line boring machine having a first support means 24 coupled to a second support means 22 by a pair of guide members 18 and a threaded rod 32. A motor 36 drives the threaded rod 32, thereby adjusting a separation distance between the first and second support means 24, 22. York fails to disclose, teach, or fairly suggest an apparatus that includes a base

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member having a first aperture disposed therethrough; a drive platform having a second aperture disposed therethrough, *the drive platform being spaced apart from the base member by a separation distance and aligned with the base member such that the first and second apertures are approximately aligned along an axis*; a plurality of guide members extending between the drive platform and the base member, at least one of the drive platform and the base member being moveable along the guide members to increase or decrease the separation distance; at least one drive member operatively coupled between the drive platform and the base member, *wherein the plurality of guide members and the at least one drive member are distributed around the first and second apertures*. Therefore, claim 1 is allowable over York.

The Other Cited References (Orrell, Kostrzewski, Brown, and Boyl-Davis) fail to remedy the above-noted absent teachings of York. Therefore, claim 1 is allowable over the Other Cited References, either singly or in combination with York. Accordingly, Applicants respectfully submit that claim 1, and claims 2-12 depending therefrom, are in condition for allowance.

Claims 13-22

Similarly, claim 13 recites an apparatus for performing a manufacturing operation on a workpiece, the apparatus comprising a track assembly adapted to be attached to the workpiece; a carriage assembly moveably coupled to the track assembly and moveable relative to the workpiece; and a tool feed unit coupled to the carriage assembly and adapted to be coupled to a tool assembly and to controllably engage the tool assembly with the workpiece, the tool feed unit including: a base member having a first aperture disposed therethrough; a drive platform having a second aperture disposed therethrough, *the drive platform being spaced apart from the base member by a separation distance and aligned with the base member such that the first and second apertures are approximately aligned along an axis*; a plurality of guide members extending between the drive platform and the base member, at least one of the drive platform and the base member being moveable along the guide members to increase or decrease the separation

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distance; at least one drive member operatively coupled between the drive platform and the base member, *wherein the plurality of guide members and the at least one drive member are distributed around the first and second apertures*; and a servo motor operatively coupled to the drive member such that as the servo motor drives the drive member, the separation distance is varied. (emphasis added).

For the reasons set forth above, the Cited References do not disclose, teach, or fairly suggest the apparatus recited in claim 13. More specifically, the Cited References, either singly or in combination, do not teach or suggest an apparatus that includes a tool feed unit having a base member having a first aperture disposed therethrough; a drive platform having a second aperture disposed therethrough, *the drive platform being spaced apart from the base member by a separation distance and aligned with the base member such that the first and second apertures are approximately aligned along an axis*; a plurality of guide members extending between the drive platform and the base member, at least one of the drive platform and the base member being moveable along the guide members to increase or decrease the separation distance; at least one drive member operatively coupled between the drive platform and the base member, *wherein the plurality of guide members and the at least one drive member are distributed around the first and second apertures*. Accordingly, claim 13 is allowable over the Cited References, and claims 14-22 depending from claim 13 are also allowable.

Claims 23-26

Claim 26 recites a method of performing a manufacturing operation on a workpiece, the method comprising providing a tool feed unit having a base member moveably coupled to a drive platform by a plurality of guide members, *the base member defining a first aperture and the drive platform defining a second aperture approximately aligned with the first aperture along an axis,* at least one of the drive platform and the base member being moveable along the guide members to increase or decrease a separation distance therebetween, the tool feed unit

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including at least one drive member operatively coupled between the drive platform and the base member, and a servo motor operatively coupled to the at least one drive member, *wherein the plurality of guide members and the at least one drive member are distributed around the first and second apertures*; operatively coupling a manufacturing tool to the tool feed unit; and controllably rotating the at least one drive member using the servo motor to vary a separation distance between the drive platform and the base member and to engage the manufacturing tool with the workpiece. (emphasis added).

Again, for the reasons set forth above, the Cited References do not disclose, teach, or fairly suggest the method recited in claim 23. More specifically, the Cited References, either singly or in combination, do not teach or suggest a method that includes providing a tool feed unit having a base member moveably coupled to a drive platform by a plurality of guide members, *the base member defining a first aperture and the drive platform defining a second aperture approximately aligned with the first aperture along an axis,* at least one of the drive platform and the base member being moveable along the guide members to increase or decrease a separation distance therebetween, the tool feed unit including at least one drive member operatively coupled between the drive platform and the base member, and a servo motor operatively coupled to the at least one drive member, *wherein the plurality of guide members and the at least one drive member are distributed around the first and second apertures.* Accordingly, claim 23 is allowable over the Cited References, and claims 24-26 depending from claim 23 are also allowable.

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CONCLUSION

For the foregoing reasons, Applicants respectfully request reconsideration and withdrawal of the rejections of claims 1-26 and allowance of same. If there are any remaining matters that may be handled by telephone conference, the Examiner is kindly invited to call the undersigned at his convenience.

Respectfully submitted,

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Enclosures: Revised Formal Drawings

MAIL CERTIFICATE

I hereby certify that this communication is being deposited with the United States Postal Service via first class mail under 37 C.F.R. § 1.08 on the date indicated below addressed to: MAIL STOP AMENDMENTS, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

December 16, 2005
Date of Deposit

Wendy Saxby

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